

IESO Stakeholder Advisory Committee Meeting Notes – August 14, 2019

Advisory Committee Members:

Mr. Brian Bentz (representing Distributors and Transmitters)
Mr. Nicolas Bossé (representing Energy Related Businesses and Services)
Mr. David Butters (representing Generators)
Mr. Pat Chilton (representing Ontario Communities)
Ms. Judy Dezell (representing Ontario Communities)
Ms. Brandy Giannetta (representing Generators)
Ms. Malini Giridhar (representing Energy Related Businesses and Services)
Ms. Julie Girvan (representing Consumers)
Mr. Jim Hogan (representing Distributors and Transmitters)
Ms. Rachel Ingram (representing Energy Related Businesses and Services)
Mr. Bruno Jesus (representing Transmitters and Distributors)
Mr. Paul Norris (representing Generators)
Mr. Mark Passi (representing Consumers, via teleconference)
Mr. Mark Schembri (representing Consumers)
Mr. James Scongack, Vice Chair (representing Generators)
Mr. Terry Young (representing IESO)

Regrets:

Mr. Frank Kallonen (representing Distributors and Transmitters)
Mr. Hari Suthan (representing Energy Related Businesses and Services)

IESO Board Members:

Mr. Michael Bernstein
Mr. Simon Chapelle
Ms. Cynthia Chaplin
Mr. Peter Gregg
Ms. Margaret Kelch
Ms. Pat Koval
Mr. Joe Oliver
Ms. Deborah Whale

Presentations:

Mr. Peter Gregg
Mr. Terry Young

August 20, 2019

Please report any comments by email to engagement@ieso.ca

Ms. Barbara Ellard
Mr. Chuck Farmer
Mr. Leonard Kula
Ms. Candice Trickey
Ms. Barbara Anderson

Meeting materials can be accessed online at www.ieso.ca/sac

Agenda Item 1. Welcome Remarks

Mr. Brian Bentz welcomed Mr. Pat Chilton to the SAC. Mr. Chilton hails from Moose Factory and currently lives in Timmins. He is the CEO of Five Nations Energy Inc.

Mr. Bentz welcomed a special guest to the meeting: the Hon. Bill Walker is the new Associate Minister of Energy and represents the riding of Bruce–Grey–Owen Sound. Elected to the legislature in 2011, he was formerly the Minister of Government and Consumer Services. Mr. Scongack noted that Bruce Power has worked extensively with Mr. Walker, and said he is known as a politician dedicated to community engagement.

Mr. Walker said the Minister of Energy, Premier, cabinet, and caucus members are all committed to ensuring reliability and cost effectiveness within the energy sector and that stakeholder engagement will play an important role.

Agenda Item 2. IESO Business Update Items – Memoranda and Discussion

Mr. Terry Young

Mr. Young provided the following business updates:

On the conservation front, the IESO is delivering the Interim Energy-Efficiency Framework that was introduced at the end of March. Participation levels are comparable to the previous framework. The IESO has worked closely with local distribution companies (LDCs) with respect to the submission of wind-down costs, transfer of customer applications, and coordinated communications. Customer disruption has been minimal.

The Achievable Potential Study was recently completed and the final report will be available in September. It identifies energy efficiency potential in Ontario.

The IESO is developing an energy-efficiency auction pilot to test the feasibility of acquiring peak demand reductions through an auction mechanism. The objective is to inform the future opportunities for energy efficiency to compete directly against other resources in a capacity auction or through an alternative competitive procurement mechanism. A draft will be released

in the fall for feedback. The intent is to hold a single auction next year with a two-year commitment period.

As part of the Interim Energy-Efficiency Framework, the Local Program Fund makes funding available to LDCs to deliver local programs that are not duplicative of the IESO province-wide programs. Applications are now being accepted. Four local program concepts have been approved. Three concepts follow a collaborative delivery model that involves the participation of 19 LDCs. Half of the \$27-million budget has been committed.

With respect to stakeholder and community engagement, planning activities are continuing in eight regions. The third First Nations Energy Symposium will take place in Toronto on November 4-5 with the theme of local capacity building. An energy workshop is being planned for the Métis Nation of Ontario in order to understand its priorities and interests. The IESO has taken over delivery of conservation programs for First Nation communities.

A Technical Panel (TP) meeting was held yesterday during which members reviewed the market rules to enable the first capacity auction in December 2019. The TP voted to recommend IESO board approval, and approval will be sought this month.

Mr. Jim Hogan commended the IESO for expanding the scope of the Windsor-Essex regional plan to include significant growth happening in the agricultural sector west of London.

Ms. Brandy Giannetta noted that expanded representation is needed on the TP, particularly from distributed energy resources (DERs). Mr. Young said the composition of the TP is under consideration.

Mr. Mark Schembri asked if retail consumers would be eligible to participate in the energy-efficiency auction pilot. Mr. Young said the IESO is working this out, but he sees no reason why they would not be allowed in.

Ms. Rachel Ingram said with respect to the market rule amendments that were approved yesterday by the TP for the Transitional Capacity Auction (TCA), there is concern that the Association of Major Power Consumers in Ontario (AMPCO) and the Advanced Energy Management Alliance (AEMA) brief was posted just 18 hours prior to the TP meeting and that this did not provide sufficient time for consideration of objections to the amendments. It is hoped that the objections will be made available to the IESO board. Mr. Young said the IESO's understanding was that AMPCO and AEMA requested a meeting to discuss this submission in advance of its posting and that it was posted immediately following the meeting with the IESO. Mr. Young stated that the legal brief would be made available to the board.

Ms. Julie Girvan asked if the energy-efficiency auction pilot is being developed internally by the IESO. Mr. Young replied that it is. Proposals will be sought later this year and the auction will take place in 2020.

Mr. Bruno Jesus asked if loss reduction is being considered in the energy-efficiency auction pilot. Mr. Young said the scope has not been finalized.

Mr. Nicolas Bossé noted that it is interesting that those at the retail level would be allowed to participate in a wholesale product offering within the capacity auction.

Comment from the Floor

Mr. Colin Anderson, AMPCO, echoed Ms. Ingram's concern that the TP did not have sufficient time to read and understand objections made to the market rule amendments for the TCA, or to address what was seen as a fundamental flaw in the market rules. Mr. Young noted that the chair of the TP offered to defer the vote at yesterday's meeting, but the committee decided to go ahead.

Mr. James Scongack commented that the IESO does a lot of stakeholder engagement work and takes stakeholder feedback as an input but that ultimately the IESO needs to make a decision that it is accountable for. Mr. Scongack suggested that a future SAC meeting held in Northern Ontario would serve to broaden stakeholder participation.

Agenda Item 3. Update from the CEO

Mr. Peter Gregg

Mr. Gregg introduced two new IESO board members in attendance.

Ms. Patricia Koval is a corporate director and lawyer, a former adjunct professor at the University of Toronto, and a recently retired senior partner from Torys LLP. She serves on the board of Trans Mountain Corporation. She is a member of the board of the Institute of Corporate Directors and the Canadian Performance Reporting board of the Chartered Professional Accountants of Canada. She is chair of the Toronto Region Conservation Foundation and serves on various conservation-focused organizations, including the Ontario regional board of the Nature Conservancy of Canada.

Mr. Michael Bernstein is president of Juno Advisors Ltd., a private investment company. He is the former president and CEO of Capstone Infrastructure Corporation and the former chair of the Association of Power Producers of Ontario.

Mr. Steve Baker, former president of Union Gas Limited, and Mr. Richard Wilson, a partner in PwC Canada's cyber security and privacy practice, have also joined the IESO board.

Mr. Gregg noted that it was 16 years ago today that Ontario last experienced a major power blackout. Much progress has been made since then toward enhancing reliability, including improved compliance to the standards governed by the North American Electric Reliability Corp (NERC).

Mr. Gregg explained the rationale for the IESO decision to stop work on the Incremental Capacity Auction (ICA). Firstly, there is sufficient energy available in the province for the next two decades. Foreseeable additional capacity needs of 1000-2000 MW over this period can be met with existing and available resources, eliminating the requirement for new base load. Secondly, there were stakeholder concerns surrounding the High Level Design of the ICA and these concerns need to be better understood. The IESO remains committed to using competition to balance reliability and cost effectiveness. The first expanded Demand Response (DR) auction will take place in December 2019 and new resources will be added during the next few years. Recognizing that the capacity auction does not necessarily work for all resources, alternative procurement processes will be considered.

The next annual planning outlook will be released this fall and extensive stakeholder engagement will begin on how best to meet the needs in the outlook. While a capacity auction is one method we would like to hear from stakeholders what other procurement mechanisms should be considered. A cost-benefit analysis to support decisions will be important. Thanks in part to the hard work of stakeholders, the energy stream is moving along well.

The IESO revenue requirement has been flat for the past three years. The IESO has proposed an increase of around 2% per year and this will be presented to the board in a few weeks' time. The increase is needed to support wage growth in collective agreements and to manage cyber security enhancements in next few years. The new five-year strategic plan reinforces the IESO commitment to a competitive marketplace. The plan will be submitted to the minister in early September.

Comments

Mr. Bentz said it is becoming more difficult to forecast load. How does the IESO manage volatility of load going forward? Mr. Gregg said various scenarios are reflected in the annual planning outlook. The IESO has developed a sensitivity analysis and is confident that the right amount of conservatism is built in. The capacity market will put resources through a relatively small time commitment compared with 20-year contracts. Continued development of the capacity market is essential to managing volatility.

Ms. Dezell echoed Mr. Bentz's point about increasing volatility and suggested that the IESO keep a long-term perspective. Mr. Gregg replied that moving away from the ICA does not mean moving away from a long-term view.

Mr. Scongack said the ICA was causing a lot of distraction, for better or for worse, and stopping work on it will allow the sector to focus.

Mr. David Butters agreed that shelving the ICA was a good decision. He questioned the use of the term Transitional Capacity Auction. Mr. Gregg said the IESO is shifting away from using the term, and in future it will be referred to as an evolving capacity market. Mr. Butters expressed concern that the transitional capacity auction would morph into the larger incremental capacity auction. Mr. Gregg stated that the plan is not for the transitional capacity auction to evolve back into an incremental capacity auction and will work with stakeholders on other procurement mechanisms on capacity. Mr. Butters said the addition of alternative procurement mechanisms is a good idea. Also, the cost-benefit analysis is important going forward. Mr. Gregg said consultations around who should own the risks would take place. Mr. Butters said Enbridge and APPrO met with the IESO in July to discuss the challenge of electricity and natural gas alignment. It is important to make them work together. The shorter the commitment period, the more difficult it is to align them.

Mr. Paul Norris said it is important to keep an eye on the assumption that resources on the ground now will continue to operate. Mr. Gregg agreed.

Ms. Ingram said capacity auctions must be open and transparent and provide a level playing field. There is a concern that the proposed market rule amendments for the TCA do not provide a level playing field. Mr. Gregg said the IESO would continue to address this concern.

Mr. Schembri asked how the market performed this summer. Mr. Gregg said it was reliable and served the province well.

Ms. Malini Giridhar asked if natural gas capacity is considered in integrated regional planning. Mr. Gregg said it is and will receive additional attention with Steve Baker's appointment to the Board.

Agenda Item 4. Market Renewal – Energy Update

Ms. Barbara Ellard

Ms. Ellard said the energy market is nearly 16 years old. Technological change has been significant, as evidenced by the arrival of electric vehicles, DERs, storage, and prosumers.

The past 16 years have revealed flaws and associated higher costs within the energy market. Day-to-day operating profiles have begun to change and there is a need to find a better way to commit, dispatch, and price to ensure reliability and cost-effectiveness.

The final High Level Designs are published. The fundamental flaw of the current market is that the market price is not reflective of system conditions. The price ignores transmission constraints, congestion, and operational constraints, for example. Out-of-market payments are required to ensure reliability. Ontario's two-schedule system has prevented the IESO from making improvements. While incremental changes have been made, locational prices are needed to evolve the market more significantly.

In addition to pricing, dispatch and resource scheduling also needs improvement. The energy work stream will introduce a day-ahead market, providing financial incentives to secure the next day's operational profile. It will also introduce real-time unit commitment and a single-schedule market.

Feedback on the High Level Design has been generally supportive. Areas of concern expressed by stakeholders include zonal pricing for loads, how to align market changes with contract changes, and implementation risks for LDCs.

Stakeholders expressed concerns on the load-pricing component of the design. After consulting with AMPCO about risk management, the IESO has proposed choosing between an Ontario zonal price and a nodal price, and this has been reflected in the updated High Level Design.

Stakeholder engagement on the detailed design will take place this fall.

The energy business case will focus on quantifying unit commitment and dispatch, as well as pricing flaws within intertie transactions and dispatch. Modeling results and cost estimates will be discussed at the Market Renewal Plan (MRP) stakeholder update on August 26. Response to the feedback and final business case will take place in September, to be wrapped up in October.

Comments

Mr. Bentz asked, with respect to moving to locational/marginal pricing, what behaviours are expected by sending a different pricing signal to the market? He asked what the impact would be on the retail consumer. Ms. Ellard said having price signals that are reflective of the system conditions would elicit a better response from suppliers and consumers. People may not currently have the right incentives to ensure competitive bidding. The Market Surveillance Panel has documented that there is an opportunity for gaming, and locational prices will eliminate this. Mr. Bentz asked if there would be a net cost saving. Ms. Ellard said total system

cost would be reduced. Regulated price plan (RPP) consumers are expected to stay on an RPP pricing regime, based upon the average Ontario zonal price.

Ms. Giannetta asked when stakeholders will have a better understanding of the detailed design and what are the next steps for market amendment impacts with respect to contracts. Ms. Ellard said the detailed design schedule will be outlined at the August 26 MRP meeting. The IESO will continue to work in unison with the contract team to ensure cohesion.

Ms. Girvan asked what changes were made in response to concerns expressed by AMPCO. Are there implications for other customers? Ms. Ellard said one concern was that with respect to volatility that might arise from zonal pricing. As to the impact, an average uniform price would be lower for some zones.

Mr. Colin Anderson said AMPCO was concerned about trade-offs between short- and long-term economic efficiency. Eight of the 10 zones were going to pay more than an average price. There was concern with respect to risk management. AMPCO members are paying a lot and cannot afford additional upward pressure. Locational marginal pricing (LMP) is seen as a risk with no corresponding return and no way to mitigate it. After fruitful discussions with the IESO, AMPCO is satisfied that the optionality of the new proposal as that would allow the vast majority of industrials to pay an average price going forward. AMPCO was thankful to the IESO having provided the alternative load pricing proposal.

Ms. Ellard said impacts on other consumers will be marginal and costs will come down for all consumers.

Mr. Hogan noted that the OEB approves final RPP rates. He asked if there is a plan to work with OEB? Ms. Ellard said the IESO has worked with the OEB throughout the High Level Design phase and this will continue through the detailed design phase.

Mr. Schembri noted that if AMPCO is happy with the zonal pricing, it could be assumed that Class B consumers will be negatively impacted. Ms. Ellard said the system costs through all of the MRP changes would be reduced for all customers. The change in the load pricing design has a marginal impact on non-Class A customers. Mr. Schembri asked if these efforts would result in an increase in the hourly Ontario energy pricing (HOEP) and reductions to global adjustment pricing. Ms. Ellard replied that it is difficult to forecast but that some design elements may provide downward pressure on market prices.

Mr. Anderson added that AMPCO's participation in market renewal is to find reductions in cost. What is good for AMPCO members may be good for other people. Class B members would benefit just as much or more than Class A members.

Mr. Jesus asked how the changes would affect transmission and what signals will be sent to transmitters from an outage planning perspective. Second, how will the signals affect new customers wanting to locate in Ontario? Ms. Ellard said the system is currently dispatched based on reliable operations and that the changes will not affect how we dispatch the system from a transmission perspective. The changes are focused on scheduling and pricing. The result will be more transparent price signals, and congestion will become more visible. Mr. Jesus asked if the signals would encourage transmission development. Ms. Ellard said this has been seen in other jurisdictions.

Agenda Item 5. Market Renewal – Capacity Update

Mr. Terry Young, Mr. Leonard Kula, Mr. Chuck Farmer

Mr. Farmer provided a preliminary look at the assessment around the upcoming annual planning outlook to be released later this year. Mr. Farmer focused in on the slides that outline that we are energy adequate but we have some capacity requirements. The IESO does not see a need for new build for reliability reasons. The need for additional capacity would emerge in the year 2023 when the phase-out of the Pickering nuclear plant begins. This will translate to a need for 1000-2000 MW over the longer-term if the existing resources remain. If existing resources do not remain, significantly more capacity will be required.

The energy adequacy outlook considers Ontario as an isolated system, without imports. It shows adequacy for the next 20 years if existing resources continue to participate. If existing resources do not renew at the end of their contracts, the gas fleet will fill any potential shortfalls until 2028 when significant needs would emerge. Therefore, throughout the next decade the requirement is for resources that run very little. They will be there for extreme weather events and unforeseen conditions. Overall, a 1% increase in demand is expected.

Comments

Mr. Norris said the assumption that all resources continue to operate is difficult given that capital investment decisions must be made now for 2029-2030. Mr. Kula said a short-term commitment mechanism works well for imports. Long-term capital investments require alternative mechanisms. The challenge is in determining when is a good time for resources to exit, and whether they should exit. Mr. Kula went on to state in response to an earlier comment from Mr. Butters that the IESO will facilitate this while ensuring alignment of electricity and gas. With respect to cost-benefit analysis, it is necessary to think of system cost outside of the cost of the resource. For example, on each of the five peak days so far this year, base load resources have been spilled, including water, wind, and nuclear resources. Upwards of 1000 MW have been spilled at 3 a.m.

Mr. Young said monthly update meetings associated with market renewal would continue over the next 18 months. Phase 1 rules for the capacity stream were dealt with at yesterday's TP meeting, and Phase 2 is to begin within a few days. This will be followed by a discussion of the annual planning outlook and how to meet identified needs.

Mr. Bentz expressed concern about the forecast assumptions on the demand side in the face of an increasingly volatile market which will see the arrival of cannabis operations, data centres, DERs, fuel switching, electric vehicles, mass transit, and generators coming off contract. He asked if it would make sense to have a band of values as opposed to a straight line on the planning outlook graph. Mr. Farmer said electric vehicles would not shock the system over the next 10 years. He worries more about risks caused by economic change. The global economic crisis of 2008 was highly impactful. Mr. Bentz asked if Metrolinx initiatives have been considered. Mr. Farmer said they have.

Ms. Judy Dezell noted that studies indicate people are charging electric vehicles during high-peak rather than low-peak times, and asked how the IESO will work to manage human behavior? She asked how climate change is modeled. Mr. Farmer said customers will be encouraged to charge their vehicles at night. High-peak charging and concentration of EV adoption will be impactful to LDCs, but will not significantly impact the overall system. Factoring in climate change impacts remains a weakness in forecasting that the IESO seeks to address.

Ms. Giannetta supports the needs for the long term reliability needs engagement. Mr. Giannetta said wind generation is not an *ad hoc* process so decisions need to be made now for adding future capacity. Acquiring capacity does not have to be done on an individual basis; bilateral contracting is coming. Mr. Kula said in the absence of a robust buyer community, it is difficult to facilitate bilateral contracting.

Mr. Bentz said with respect to bilateral contracts, industrial customers are looking at one-off cogeneration facilities or reciprocating gas engines to curtail what the grid sees as demand. This is a growing trend and presents a potential risk in terms of asset utilization. He asked how this is factored into the forecast. Mr. Farmer said behind-the-meter generation is a blind spot. The IESO forecasts on a net and grid level. Mr. Bentz noted that the Ontario Energy Board is conducting a review of connecting facilities behind the meter.

Agenda Item 6. Demand Response Working Group Update

Ms. Candice Trickey

Ms. Trickey highlighted progress on the revised DR work plan.

There are two initiatives concerning payments when DR resources are activated in the market. The first is compensation for out-of-market activation of hourly DR resources. By the next auction it is expected they will be provided compensation when they are activated for a test. Market rules will be developed this fall. The second initiative is to determine whether or not to provide energy payments for economic activation of DR resources. While this is a rare occurrence we recognize that it is an important one to the DR community. The FERC ruling says that if there is a net benefit to consumers to activating that resource and giving them an energy payment then they should receive an energy payment. Ms. Trickey outlined that the IESO is looking into this but that it needs to take time to understand the implications and to get this right. A draft on the scope, approach, and timeline for this initiative will be provided at the September 4 meeting of the Demand Response Working Group.

Comments

Ms. Ingram said her constituents are supportive of the conversations and progress on out of market payments. Ms. Ingram said the subject of energy payments has been raised consistently since the beginning of the DR auction and it is disappointing that it is not yet resolved. The currently proposed rules are discriminatory against DR participants. Generators will be entitled to energy payments and DR participants will not. A legal brief will be provided to the IESO Board before a decision is made. This will not be resolved by the December auction, so discrimination will happen there. Ms. Trickey said in all likelihood any activations will be test activations, not economic activations. Ms. Ingram said it would make sense to get the rules for the capacity auctions right at the beginning, not to fix them later on.

Mr. Schembri asked how many DR calls there have been outside of tests this year. Ms. Trickey said there have been none.

Mr. Anderson echoed Ms. Ingram's concern about discrimination in the proposed rules and asked if they could be resolved before pushing ahead with the December auction. There is no significant capacity requirement for the next decade, and no urgency. Mr. Young said the IESO is taking a phased-in approach and notes that the December date for the capacity auction is important to this approach.

Agenda Item 7. 2020-2022 Business Plan

Ms. Barbara Anderson

Ms. Anderson summarized the five-year strategic plan. Refreshments have been made to the purpose and vision. There are five key strategic objectives:

1. culture and workforce transformation
2. competitive marketplace
3. reliability

4. stakeholder value perception
5. prioritized spending

six risks have been identified: policy and regulatory uncertainty, particularly around the competitive marketplace; government stakeholders losing faith in the IESO approach to deliver on resource adequacy; frequency and complexity of cyber attacks; extreme weather events; scarcity of skilled human resource talent to support the needs of the sector; and non-electricity entrants, where the Googles and Amazons potentially cause disruption. Mitigation strategies have been developed for all of the identified risks.

With regards to the business plan, revenue requirement levels were flat from 2017 to 2019. A 2% annual increase for the next three years has been suggested, in line with the Consumer Price Index. The increase will allow for investment in cyber security enhancements, efficiency of the markets, working with stakeholders on enduring mechanisms for resource adequacy, and ensuring reliability is maintained in a cost effective manner.

Comments

Mr. Bentz asked what is meant by potential risks posed by Google or Amazon. Ms. Anderson said any non-electricity entrant could disrupt the market.

Mr. Scongack asked if the winding down of the ICA could bring about a net benefit to the overall revenue requirement. Ms. Anderson said most of the capital is financed and does not come through the IESO fee.

Mr. Hogan said customers and service providers want to know what will happen after 2020 when the conservation programs are completed. Mr. Young said discussions on this will begin soon.

Mr. Butters asked for clarification as to whether the TCA will become the preferred method for capacity procurement. Ms. Anderson said the capacity team is stratifying the resources and looking at the risk profile for each to determine the correct mechanism. Capacity auction is one option of many that will be investigated over the course of 2020.

Comment from the Phone

With respect to conservation efforts, Mr. David Katz said deep retrofits required by decarbonization include electricity and gas. The duality should be reflected to ensure economic sense. Mr. Young said this would be considered post-2020.

Agenda Item 8. Other Business

There was no other business.

Agenda Item 9. Adjourn

Mr. Bentz adjourned the meeting. The next meeting will take place on October 16, 2019.